



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Frank O'Bannon  
Governor

Lori F. Kaplan  
Commissioner

July 11, 2003

100 North Senate Avenue  
P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
www.IN.gov/idem

TO: Interested Parties / Applicant

RE: **Eli Lilly & Company** **059-17791-00001**  
FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

## Notice of Decision - Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures

FNPERAM.wpd 8/21/02

July 11, 2003

Mr. David O'Donnell  
Eli Lilly & Company  
P. O. Box 708, Drop Code GL60  
Indianapolis, Indiana 46140

Re: 059-17791  
First Administrative Amendment to  
FESOP 059-12151-00001

Dear Mr. O'Donnell:

Eli Lilly & Company, located at 2001 West Main Street, Greenfield, Indiana 46140 was issued a Federally Enforceable State Operating Permit (FESOP) on May 2, 2002 for pharmaceutical research facility. A letter requesting an administrative permit amendment to the FESOP was received on May 30, 2003. The changes described in the letter qualify as administrative permit amendments because they consist of corrections to typographical errors and revisions to descriptive information where the revision does not trigger new applicable requirements. Therefore, pursuant to the provisions of 326 IAC 2-8-10(a)(1) and (6) the permit is hereby administratively amended as follows (new language is **bolded** and deletions are ~~struck-through~~ for emphasis):

Request 1: Incinerators (ID#253-1 and ID#241-1) - Included in Section D.2 of the FESOP were conditions related to Lilly's two incinerators (ID#253-1 and ID#241-1). Specifically, Conditions D.2.4 and D.2.5 addressed exemptions from the Emission Guidelines for Medical Waste Incinerator and for Commercial and Industrial Solid Waste Incinerator Units, respectively. In addition, Condition D.2.7 includes record keeping requirement associated with the claimed exemptions. In order to correct typographical errors, as allowed under 326 IAC 2-8-10(a)(1), and/or to make a change to a record keeping requirement that is not environmentally significant, as allowed under 326 IAC 2-8-10(a)(5), Lilly respectfully requests that the subject permit be administratively amended.

Section D.2.4 -Medical Waste Incinerator Emission Guideline Exemption - This section of the FESOP mistakenly applies to both the Consumat incinerator and the Brule incinerator. However, Lilly only operates the Consumat incinerator (ID#241-1) as a co-fired combustor, as described in the Notice of Exemption Claim under 326 IAC 11-6, 40 CFR Part 60, Subpart Ce, submitted to IDEM and EPA on March 10, 2000. Therefore, the permit should be amended to correctly identify incinerator ID#241-1 as the only co-fired combustor:

Response 1: Condition D.2.4 will be revised as requested:

D.2.4 Medical Waste Incinerator Emission Guideline Exemption [ 326 IAC 12 and 40 CFR Part **60.30e, Subpart Ce**]

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The weight of the fuel feed stream to the two (2) incinerators, **ID#241-1** shall be comprised of ten percent (10%) or less, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis. Compliance with ~~the~~ **this** limit and the record keeping requirement in Section D.2.7, qualifies the two (2) incinerators, **ID#241-1** as a "co-fired combustors" as defined by 40 CFR 60.51c and exempts ~~them~~ **it** from 40 CFR Part 60.30e,

### Subpart Ce.

Request 2: Section D.2.5 - 40 CFR Part 60.2000, Subpart CCCC - This section of the FESOP mistakenly refers to Subpart CCCC - Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units [326 IAC 12 and 40 CFR Part 60]. However, the two incinerators were constructed prior to November 30, 1999. Therefore, the reference should be to 40 CFR Part 60, Subpart DDDD, Emission Guidelines for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction on or before November 30, 1999. Lilly requests that this typographical error be corrected.

Response 2: Condition D.2.5 will be revised as requested:

D.2.5 40 CFR Part 60.2000 **2500**, Subpart ~~CCCC~~ **DDDD** --~~Standards of Performance for New Stationary Sources and~~ Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units [ 326 IAC 12 and 40 CFR Part 60.**2500**]

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- (a) The weight of the waste feed stream to the 253-1 incinerator shall be comprised of ninety percent (90%) or greater, in aggregate, of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste, as defined in 40 CFR ~~60.2265~~ **60.2875**, as measured on a calendar quarter basis. As specified in 40 CFR ~~60.2010(a)~~, **60.2555(a)** due to the above limit and the record keeping requirement in Section D.2.7, the incinerator is exempt from 40 CFR Part 60, Subpart ~~CCCC~~ **DDDD**.
- (b) The weight of the waste-feed stream to the 241-1 incinerator shall be comprised of thirty percent (30%) or greater, in aggregate, of municipal solid waste or refuse-derived fuel, as defined in 40 CFR 60 Subpart Ea, Subpart Eb, Subpart AAAA and Subpart BBBB, and the incinerator has the capacity to burn less than 35 tons/day municipal solid waste or refuse-derived fuel, as measured on calendar quarter basis. As specified in 40 CFR ~~60.2010(a)~~ **60.2555(c)**, due to the above limit and the record keeping requirement in Section D.2.7, the incinerator is exempt from 40 CFR Part 60, Subpart ~~CCCC~~ **DDDD**.

Request 3: Lilly respectfully requests that the record keeping requirements in subsections D.2.7(c) and (d) be modified to accurately demonstrate compliance with Condition D.2.4 and D.2.5.

Response 3: Condition D.2.7 will be revised to be in agreement with conditions D.2.4 and D.2.5:

#### D.2.7 Waste Throughput

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The Permittee shall maintain records of the following values:

- (a) Total monthly amount of waste burned and annual amount of waste burned to the two (2) incinerators rolled on a monthly basis;
- (b) Total monthly hydrochloric acid emissions and annual hydrochloric acid emissions rolled on a monthly basis;
- (c) The weight on a calendar quarter basis, **in aggregate** of ~~hospital waste and medical/infectious waste combusted~~ **pathological waste, low-level radioactive waste, and/or chemotherapeutic waste combusted** and the weight of all other fuels and wastes combusted in incinerator 253-1; and

- (d) The weight on a calendar quarter basis, **in aggregate of hospital waste and medical/infectious waste, the weight** ~~combusted~~ of municipal waste combusted, and the weight of all other fuels and waste combusted in incinerator 241-1.

Request 4: Boilers 262-1 and 262-2 were decommissioned in November 2002. Therefore, the FESOP should be amended to reflect removal of these units from Section A.2(a), Section A.3(a) and Section D.1.

Response 4: Boilers 262-1 and 262-2 will be removed from Section A.2(a), Section A.3(a), Section D.1. and from the Quarterly Reporting Form on Page 37 of 45 of the FESOP as follows:

**A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]**

This stationary source consists of the following emission units and pollution control devices:

- (a) Four (4) boilers

Qty	Facility/Operation Description and ID No.	Control Device and ID No.	Stack ID No.
<b>5 4</b>	natural gas/no. 2 fuel oil fired boiler (ID#s 254-1, 254-2, 254-3, <b>and</b> 254-4, <del>and 262-4</del> ) with heat input capacities of 51.0, 63.0, 67.0, and 78.0, <del>and 3.2</del> million Btu per hour, respectively	none	254-1, 254-2, 254-3, <b>and</b> 254-4, <del>and 262-4</del>

**A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]**

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) ~~One (1) natural gas/no. 2 fuel oil-fired boiler (ID# 262-2), with a heat input capacity less than or equal to 1.95 million Btu per hour (Note: This insignificant activity has applicable requirements in section D.1).~~

**SECTION D.1 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-8-4(10)]:**

- (a) ~~Five (5)~~ **Four (4)** natural gas/no.2 fuel oil fired boilers (ID#s 254-1, 254-2, 254-3, **and** 254-4, ~~and 262-4~~ with heat input capacities of 51.0, 63.0, 67.0, **and** 78.0 ~~and 3.2~~ million Btu per hour, respectively. These boilers do not have any air pollution control devices and each one exhausts through stack 254-1, 254-2, 254-3, **and** 254-4, ~~and 262-4~~, respectively.

**Insignificant activities y:**

- (a) ~~one (1) natural gas/no. 2 fuel oil fired boiler (ID #262-2), with a heat input capacity less than or equal to 1.95 million Btu per hour;~~
- (b) ~~three (3) natural gas-fired boilers (ID#s 293-1, 229-1 and 229-2) with heat input capacities less than or equal to 2.1 million Btu per hour;~~

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## Emissions Limitations and Standards [326 IAC 2-8-4(1)]

### D.1.1 Nitrogen Oxides (NO<sub>x</sub>) From the Nine Boilers [326 IAC 2-2 and 40 CFR 52.21 and 326 IAC 2-7]

The total usage of natural gas as the primary fuel for all ~~nine (9)~~ **seven (7)** boilers including the insignificant units (i.e., boilers ~~262-2~~, 293-1, 229-1, and 229-2) shall be limited to 738.0 million cubic feet per twelve consecutive month period, rolled on a monthly basis (Note: For every gallon of #2 fuel oil used, 200 cubic feet of natural gas shall be deducted from this limit.). This fuel usage limitation is necessary to limit the potential to emit NO<sub>x</sub> to 36.9 tons per 12 consecutive month period, rolled on a monthly basis from all boilers only. This limit shall make the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 (326 IAC 2-7) rules not applicable.

D.1.2 no changes

D.1.3 no changes

D.1.4 no changes

### D.1.5 Sulfur Dioxide (SO<sub>2</sub>) Emissions From the Nine Boilers [326 IAC 2-2 and 40 CFR 52.21 and 326 IAC 2-7]

The total usage of no.2 fuel oil for all ~~nine (9)~~ **seven (7)** boilers including the insignificant units (i.e., boilers ~~262-2~~, 293-1, 229-1, and 229-2) shall be limited to 3,332.0 kilogallons per twelve (12) consecutive month period, rolled on a monthly basis. This fuel usage limitation is necessary to limit the potential to emit SO<sub>2</sub> to 82.8 tons per 12 consecutive month period rolled on a monthly basis from the boilers only. In order for the source-wide SO<sub>2</sub> emissions to not exceed the Part 70 emission threshold of 100 tons per year, the sulfur content of the no. 2 fuel shall not exceed 0.35 % sulfur content. Compliance with the SO<sub>2</sub> limit shall make the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 (326 IAC 2-7) rules not applicable.

### D.1.6 Particulate Matter (PM) [326 IAC 6-2-2(b)(c) and 326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-2(b), the particulate matter emissions from the existing boilers; identified as 254-1 and 254-2, located in Hancock County which were existing and in operation on or before June 8, 1972 shall each not exceed 0.39 pound per million Btu (lb/mmBtu).
- (b) Pursuant to 326 IAC 6-2-2(c), the particulate matter emissions from boiler 254-3 located in Hancock County, which began operation after June 8, 1972 and prior to September 21, 1983 shall not exceed 0.35 lb/mmBtu.
- (c) Pursuant to 326 IAC 6-2-4, the particulate matter emissions from the existing boilers; identified as ~~262-1, 262-2, and~~ 293-1, which ~~were~~ **was** constructed after September 21, 1983 shall ~~each~~ not exceed 0.25 lb/mmBtu.
- (d) Pursuant to Construction Permit No.: 30-07-93-0074, the particulate matter emissions from boiler 254-4 shall not exceed 0.015 lb/mmBtu.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**Office of Air Quality**  
**COMPLIANCE DATA SECTION**

**FESOP Quarterly Report**

Source Name: Eli Lilly and Company, Greenfield Laboratories  
Source Address: 2001 West Main Street, Greenfield, Indiana 46140  
Mailing Address: P. O. Box 708, Greenfield, Indiana 46140  
FESOP No.: F059-12151-60001  
Facility: ~~Five (5)~~ **Four (4)** natural gas/no. 2 fuel oil fired boilers (ID#s 254-1, 254-2, 254-3, and 254-4, ~~and 262-1~~) with heat input capacities of 51.0, 63.0, 67.0, **and** 78.0, ~~and 3.2~~ million Btu per hour, respectively.

*insignificant activities:*

(a) ~~one (1) natural gas/no. 2 fuel oil fired boiler (ID# 262-2) with a heat input capacity less than or equal to 1.95 million Btu per hour;~~

~~(b) three (3) natural gas-fired boilers (ID#s 293-1, 229-1 and 229-2), with a heat input capacities less than or equal to 2.1 million Btu per hour.~~

Parameter: Average sulfur content of no. 2 fuel oil, NO<sub>x</sub> and SO<sub>2</sub> emissions  
Limit: 738 million cubic feet of natural gas per 12 consecutive month period, rolled on a monthly basis and 0.35% sulfur content of no. 2 fuel oil; 3,332 kgals of fuel oil per 12 consecutive months rolled on a monthly basis.

Year: \_\_\_\_\_ Quarter \_\_\_\_\_

Month	Average sulfur content of fuel oil (%)	Fuel usage per month A. (cubic feet of natural gas) B. (gallons of fuel oil)	Fuel usage for the previous 12 months C. (A+ 200*B) cubic feet
Month 1		A. B.	C.
Month 2		A. B.	C.
Month 3		A. B.	C.

Note: 200 cubic feet of natural gas is equivalent to 1 gallon of #2 distillate fuel oil.

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Request 5: Emergency generator ID # 240 should be renamed as emergency generator ID #252, due to a recent relocation .

Response 5: Emergency generator ID #240 will be renamed as emergency generator ID #252. Section A.3(c) will be amended, and no other parts will be affected, since there are no specific requirements applicable to it.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) See above changes on Response 4.

(b) (c) Seven (7) no. 2 fuel oil-fired emergency generators (ID#s 226, ~~240~~ **252**, 241-out, 254a, 254b, 291, and 418), each with a heat input capacity less than or equal to 3.75 million

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Aida De Guzman at (800) 451-6027, press 0 and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments  
APD

cc: File - Hancock County  
U.S. EPA, Region V  
Hancock County Health Department  
Air Compliance Section Inspector - D J Knotts  
Compliance Data Section - Karen Nowak  
Administrative and Development  
Technical Support and Modeling - Michele Boner

# **FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) RENEWAL OFFICE OF AIR QUALITY**

**Eli Lilly and Company - Greenfield Laboratories  
2001 West Main Street  
Greenfield, Indiana 46140**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F059-12151-00001	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 2, 2002  Expiration Date: May 2, 2007
1 <sup>st</sup> Administrative Amendment No.: 059-17791	Pages Affected: 6, 7, 25, 26, 29, 30, 37
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 11,2003



## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.5 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary pharmaceutical research source.

Authorized individual:	David R. O'Donnell, Manager Plant Engineering, Maintenance and Utilities or Paul Gilson, Team Leader, Environmental Services
Source Address:	2001 West Main Street, Greenfield, Indiana 46140
Mailing Address:	P.O. Box 708, Greenfield, Indiana 46140
SIC Code:	2834 and 2879
County Location:	Hancock County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules;

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

#### (a) Four (4) boilers

Qty	Facility/Operation Description and ID No.	Control Device and ID No.	Stack ID No.
4	natural gas/no. 2 fuel oil fired boiler (ID#s 254-1, 254-2, 254-3, and 254-4) with heat input capacities of 51.0, 63.0, 67.0, and 78.0 million Btu per hour, respectively	none	254-1, 254-2, 254-3, and 254-4

#### (b) Two (2) incinerators

Qty	Facility/Operation Description and ID No.	Control Device and ID No.	Stack ID No.
1	natural gas-fired, multi chamber, Brule incinerator (ID# 253-1) with a natural gas heat input capacity of 3.9 million Btu per hour	none	253-1
1	natural gas-fired, multi chamber, Consumat incinerator (ID# 241-1) with a natural gas heat input capacity of 2.8 million Btu per hour.	none	241-1

- (c) Two (2) each 500 hours per year, no.2 fuel oil-fired back-up and emergency generators

Qty	Facility/Operation Description and ID No.	Control Device and ID No.	Stack ID No.
1	No. 2 fuel oil fired back-up generator (ID# B409) with a heat input capacity of 5.63 million Btu per hour	none	0
1	No. 2 fuel oil fired emergency generator (ID #EMG-TOX) with a heat input capacity of 19.3 million Btu per hour	none	0

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Three (3) natural gas-fired boilers (ID#s 293-1, 229-1, and 229-2), with heat input capacities less than or equal to 2.1 million Btu per hour (Note: These insignificant activities have applicable requirements in section D.1).
- (b) Seven (7) no. 2 fuel oil-fired emergency generators (ID#s 226, 252, 241-out, 254a, 254b, 291, and 418), each with a heat input capacity less than or equal to 3.75 million Btu per hour.
- (c) Fifteen (15) natural gas-fired emergency generators (ID#s 206, 223, 229, 235, 241-penthouse, 244, 245, 246, 276, 288, 292, 296, 417, 428-east, and 428-west), each with a heat input capacity less than or equal to 0.66 million Btu per hour.
- (d) Three (3) propane-fired emergency generators (ID#s 212, 290, and 248), each with a heat input capacity less than or equal to 0.42 million Btu per hour.
- (e) Two (2) no. 2 fuel oil fired emergency fire pump engines (ID#s FP-B204 and FP-B208), each with a heat input capacity of 0.82 million Btu/hr. (Note: These insignificant activities have applicable requirements in D.4).
- (f) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;
- (g) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month;
- (h) One (1) fuel oil storage tank (ID# 254-F) with a capacity of 250,000 gallons;
- (i) Any degreasing operation that does not exceed 145 gallons of solvent usage per 12 months and not subject to 326 IAC 20-6, including, but not limited to the following:

- (1) One (1) machine shop cold solvent cleaner constructed in 1982;
- (2) Two (2) Building G409 cold solvent cleaners constructed after 1990; and
- (3) One (1) Building 254 cold solvent cleaner constructed after 1990.

(Note: These insignificant activities have applicable requirements in D.5).

- (j) Activities associated with the transportation and treatment of sanitary sewage (on-site sewage treatment facility);
- (k) Asbestos abatement projects regulated by 326 IAC 14-10;
- (l) On-site fire and emergency response training approved by IDEM;
- (m) Laboratories as defined in 326 IAC 2-7-1;
- (n) Farm operations; and
- (o) A pharmaceutical production facility (Building 409).

#### A.4 FESOP Applicability [326 IAC 2-8-2]

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This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

#### A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

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- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

## SECTION D.1 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

- (a) Four (4) natural gas/no.2 fuel oil fired boilers (ID#s 254-1, 254-2, 254-3, and 254-4, with heat input capacities of 51.0, 63.0, 67.0, and 78.0 million Btu per hour, respectively. These boilers do not have any air pollution control devices and each one exhausts through stack 254-1, 254-2, 254-3, and 254-4, respectively.

### Insignificant activity:

- (a) three (3) natural gas-fired boilers (ID#s 293-1, 229-1 and 229-2) with heat input capacities less than or equal to 2.1 million Btu per hour;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 Nitrogen Oxides (NO<sub>x</sub>) From the Nine Boilers [326 IAC 2-2 and 40 CFR 52.21 and 326 IAC 2-7]

The total usage of natural gas as the primary fuel for all seven (7) boilers including the insignificant units (i.e., boilers 293-1, 229-1, and 229-2) shall be limited to 738.0 million cubic feet per twelve consecutive month period, rolled on a monthly basis (Note: For every gallon of #2 fuel oil used, 200 cubic feet of natural gas shall be deducted from this limit.). This fuel usage limitation is necessary to limit the potential to emit NO<sub>x</sub> to 36.9 tons per 12 consecutive month period, rolled on a monthly basis from all boilers only. This limit shall make the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 (326 IAC 2-7) rules not applicable.

#### D.1.2 Nitrogen Oxides (NO<sub>x</sub>) From Boiler 254-4 [326 IAC 2-8-4(12)(A)]

Pursuant to Construction Permit No. 30-07-93-0074, nitrogen oxide emissions from boiler 254-4 shall be limited to 0.23 pounds per million Btu heat input or an equivalent of 17.94 pounds per hour.

#### D.1.3 Sulfur Dioxide (SO<sub>2</sub>) Emissions From Boilers 254-1, 254-2, and 254-3 [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the combustion of #2 distillate fuel oil for boilers 254-1, 254-2, and 254-3 shall each be limited to 0.5 pounds per million BTU heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

#### D.1.4 Sulfur Dioxide (SO<sub>2</sub>) Emissions From Boilers 254-4 [326 IAC 2-8-4(12)(A)]

Pursuant to Construction Permit No. 30-07-93-0074, sulfur dioxide emissions from boiler 254-4 shall be limited to 0.36 pound per million Btu heat input.

#### D.1.5 Sulfur Dioxide (SO<sub>2</sub>) Emissions From the Nine Boilers [326 IAC 2-2 and 40 CFR 52.21 and 326 IAC 2-7]

The total usage of no.2 fuel oil for all seven (7) boilers including the insignificant units (i.e., boilers 293-1, 229-1, and 229-2) shall be limited to 3,332.0 kilogallons per twelve (12) consecutive month period, rolled on a monthly basis. This fuel usage limitation is necessary to limit the potential to emit SO<sub>2</sub> to 82.8 tons per 12 consecutive month period rolled on a monthly basis from the boilers only. In order for the source-wide SO<sub>2</sub> emissions to not exceed the Part 70 emission threshold of 100 tons per year, the sulfur content of the no. 2 fuel shall not exceed

0.35 % sulfur content. Compliance with the SO<sub>2</sub> limit shall make the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 (326 IAC 2-7) rules not applicable.

**D.1.6 Particulate Matter (PM) [326 IAC 6-2-2(b)(c) and 326 IAC 6-2-4]**

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- (a) Pursuant to 326 IAC 6-2-2(b), the particulate matter emissions from the existing boilers; identified as 254-1 and 254-2, located in Hancock County which were existing and in operation on or before June 8, 1972 shall each not exceed 0.39 pound per million Btu (lb/mmBtu).
- (b) Pursuant to 326 IAC 6-2-2(c), the particulate matter emissions from boiler 254-3 located in Hancock County, which began operation after June 8, 1972 and prior to September 21, 1983 shall not exceed 0.35 lb/mmBtu.
- (c) Pursuant to 326 IAC 6-2-4, the particulate matter emissions from the existing boiler; identified as 293-1, which was constructed after September 21, 1983 shall not exceed 0.25 lb/mmBtu.
- (d) Pursuant to Construction Permit No.: 30-07-93-0074, the particulate matter emissions from boiler 254-4 shall not exceed 0.015 lb/mmBtu.

**D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]**

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boilers IDs 254-1, 254-2, 254-3 and 254-4 pertaining to the combustion of fuel oil only.

**Compliance Determination Requirements**

**D.1.8 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]**

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The Permittee is not required to test these boilers by this permit.

**D.1.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3-7-4]**

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Compliance with Conditions D.1.3, D.1.4, and D.1.5 shall be determined utilizing one of the following options:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pound per million Btu heat input by:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

## SECTION D.2 FACILITY OPERATION CONDITIONS

### **Facility Description [326 IAC 2-8-4(10)]:**

(b) Two (2) incinerators:

- (1) one (1) natural gas fired, multi chamber, Brule incinerator (ID# 253-1) with a natural gas heat input capacity of 3.9 million Btu per hour. This incinerator does not have any air pollution control device and exhausts through stack 253-1.
- (2) one (1) natural gas fired, multi chamber, Consumat incinerator (ID# 241-1) with a natural gas heat input capacity of 2.8 million Btu per hour. This incinerator does not have any air pollution control device and exhausts through stack 241-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### **Emissions Limitations and Standards [326 IAC 2-8-4(1)]**

#### **D.2.1 Particulate Matter [326 IAC 4-2]**

Pursuant to 326 IAC 4-2 (Incinerator Rule), each of the two (2) incinerators shall:

- (a) consist of primary and secondary chambers or the equivalent;
- (b) be equipped with a primary burner unless burning wood products;
- (c) comply with 326 IAC 5-1 and 326 IAC 2;
- (d) be maintained properly as specified by the manufacturer and approved by the commissioner.
- (e) be operated according to the manufacturer's recommendation and only burn waste approved by the commissioner;
- (f) comply with other state and/or local rules or ordinances regarding the operation of incinerators;
- (g) be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, noxious odors are prevented;
- (h) to not emit particulate matter (PM) emissions in excess of 0.3 pounds per 1,000 pounds of dry exhaust gas at standard conditions corrected to 50% excess air; and
- (i) not create a nuisance or a fire hazard.

If any of the above result, the burning shall be terminated immediately.

#### **D.2.2 Carbon Monoxide (CO) [326 IAC 9]**

Pursuant to 326 IAC 9 (Carbon Monoxide Emission Rule), the Consumat incinerator ID#241-1) shall not discharge carbon monoxide unless the waste gas stream is burned in a direct-flame afterburner or is controlled by other means approved by the Commissioner. The Consumat incinerator, as a multi chamber incinerator, is an approved design by the Commissioner.

#### **D.2.3 Hydrochloric Acid (HAP) [326 IAC 2-7]**

The total annual waste throughput to the two (2) incinerators shall not exceed a total of 591 tons per twelve (12) consecutive month period, rolled on a monthly basis. This limitation was taken

by the company and is equivalent to hydrochloric acid (a HAP) emissions less than 10 tons per year rolled on a monthly basis from both incinerators. Compliance with the HAP limit shall make Part 70 (326 IAC 2-7) not applicable.

**D.2.4 Medical Waste Incinerator Emission Guideline Exemption [ 326 IAC 12 and 40 CFR Part 60.30e, Subpart Ce]**

The weight of the fuel feed stream to incinerator, ID#241-1 shall be comprised of ten percent (10%) or less, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis. Compliance with this limit and the record keeping requirement in Section D.2.7, qualifies the incinerator, ID#241-1 as a "co-fired combustors" as defined by 40 CFR 60.51c and exempts it from 40 CFR Part 60.30e, Subpart Ce.

**D.2.5 40 CFR Part 60.2500, Subpart DDDD Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units [ 326 IAC 12 and 40 CFR Part 60.2500]**

- (a) The weight of the waste feed stream to the 253-1 incinerator shall be comprised of ninety percent (90%) or greater, in aggregate, of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste, as defined in 40 CFR 60.2875, as measured on a calendar quarter basis. As specified in 40 CFR 60.2555(a) due to the above limit and the record keeping requirement in Section D.2.7, the incinerator is exempt from 40 CFR Part 60, Subpart DDDD.
- (b) The weight of the waste-feed stream to the 241-1 incinerator shall be comprised of thirty percent (30%) or greater, in aggregate, of municipal solid waste or refuse-derived fuel, as defined in 40 CFR 60 Subpart Ea, Subpart Eb, Subpart AAAA and Subpart BBBB, and the incinerator has the capacity to burn less than 35 tons/day municipal solid waste or refuse-derived fuel, as measured on calendar quarter basis. As specified in 40 CFR 60.2555(c), due to the above limit and the record keeping requirement in Section D.2.7, the incinerator is exempt from 40 CFR Part 60, Subpart DDDD.

**Compliance Determination Requirements**

**D.2.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]**

The Permittee is not required to test these incinerators by this permit.

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

**D.2.7 Waste Throughput**

The Permittee shall maintain records of the following values:

- (a) Total monthly amount of waste burned and annual amount of waste burned to the two (2) incinerators rolled on a monthly basis;
- (b) Total monthly hydrochloric acid emissions and annual hydrochloric acid emissions rolled on a monthly basis;
- (c) The weight on a calendar quarter basis, in aggregate of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste combusted and the weight of all other fuels and wastes combusted in incinerator 253-1; and
- (d) The weight on a calendar quarter basis, in aggregate of hospital waste and medical/infectious waste, the weight of municipal waste combusted, and the weight of all other fuels and waste combusted in incinerator 241-1.

The Permittee shall implement its record keeping requirements in section (c) of this condition sixty (60) days after the issuance of this FESOP.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**Office of Air Quality**  
**COMPLIANCE DATA SECTION**

**FESOP Quarterly Report**

Source Name: Eli Lilly and Company, Greenfield Laboratories  
Source Address: 2001 West Main Street, Greenfield, Indiana 46140  
Mailing Address: P. O. Box 708, Greenfield, Indiana 46140  
FESOP No.: F059-12151-60001  
Facility: Four (4) natural gas/no.2 fuel oil fired boilers (ID#s 254-1, 254-2, 254-3, and 254-4) with heat input capacities of 51.0, 63.0, 67.0, and 78.0, million Btu per hour, respectively.

*insignificant activities:*

- (a) three (3) natural gas-fired boilers (ID#s 293-1, 229-1 and 229-2), with a heat input capacities less than or equal to 2.1 million Btu per hour.

Parameter: Average sulfur content of no. 2 fuel oil, NO<sub>x</sub> and SO<sub>2</sub> emissions  
Limit: 738 million cubic feet of natural gas per 12 consecutive month period, rolled on a monthly basis and 0.35% sulfur content of no. 2 fuel oil; 3,332 kgals of fuel oil per 12 consecutive months rolled on a monthly basis.

Year: \_\_\_\_\_ Quarter \_\_\_\_\_

Month	Average sulfur content of fuel oil (%)	Fuel usage per month A. (cubic feet of natural gas) B. (gallons of fuel oil)	Fuel usage for the previous 12 months C. (A+ 200*B) cubic feet
Month 1		A. B.	C.
Month 2		A. B.	C.
Month 3		A. B.	C.

Note: 200 cubic feet of natural gas is equivalent to 1 gallon of #2 distillate fuel oil.

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_